Einstein Lectures

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The Geometry of Spacetime

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Abstract

It was Hermann Minkowski (1864-1909) who realized that the then new theory of (special) relativity proposed by Einstein could be understood as a kind of 4-dimensional geometry, one that replaces Euclidean geometry as the foundation of physical reality. Some of the features of this geometry are strikingly different from Euclidean geometry, leading to famous 'paradoxes" like the twin-paradox. However, thinking of special relativity in this geometric way was fundamental to Einstein's breakthrough to general relativity and I'll describe something of how that went.